```c
#include <stdio.h>
#define n 5
int stack[n];
int top = -1;
void push();
void pop();
void display();

void main() {
    int choice;
    char ch;
    printf("Enter \n 1. Push \n 2.Pop \n 3. Display \n ");
    scanf("%d",&choice);


    do {
        switch(choice) {
            case 1 : push();
                    break;
            case 2 : pop();
                    break;
            case 3 : display();
                    break;
            case 4 : return;
            default : printf("Wrong choice");
                    break;
        }
        printf("Enter 1. Push \n 2.Pop \n 3. Display \n
4.Stop : ");
        scanf("%d",&choice);

    } while(choice != 4);
}
void push() {
    if(top == n-1) {
        printf("The stack is full\n");
        return;
    }
    int num;
    printf("Enter the number to push : ");
    scanf("%d",&num);
    top++;
    stack[top] = num;
}
void pop() {
    if(top == -1) {
        printf("Stack is empty, you cannot pop ");
        return;
    }
    printf("The popped element is : %d \n",stack[top--]);
}
void display() {
    printf("The stack elements are : ");
    for(int i = top; i >= 0; i--) {
        printf("%d  ",stack[i]);
    }
}
```

```
output :
Enter
 1. Push
 2.Pop
 3. Display
 1
 Enter the number to push : 5
 Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 1
 Enter the number to push : 6
 Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 1
 Enter the number to push : 7
 Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 1
 Enter the number to push : 8
 Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 1
 Enter the number to push : 9
 Enter 1. Push
 2.Pop
 3. Display
4.Stop : 2
The popped element is : 9
Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 3
 The stack elements are : 8  7  6  5  Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 2
 The popped element is : 8
Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 2
 The popped element is : 7
Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 2
 The popped element is : 6
Enter 1. Push
 2.Pop
 3. Display
 4.Stop : 2
 The popped element is : 5
Enter 1. Push
```

2.Pop
3. Display
4.Stop : 2
Stack is empty, you cannot pop Enter 1. Push
2.Pop
3. Display
4.Stop :